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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,084	11/21/2006	Takayuki Noguchi	283973US6PCT	7290
22850 7590 08/16/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER TA, THO DAC	
			ART UNIT 2833	PAPER NUMBER
			NOTIFICATION DATE 08/16/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

Application No.

10/564,084

Applicant(s)

NOGUCHI ET AL.

Examiner

Tho D. Ta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,11 and 12 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____.  |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/6/06, 9/11/06, 6/7/07, 6/27/07.

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-12 are objected to because of the following informalities: Claim 1, line 14, the limitation "the circular arc" lacks antecedent basis; claim 4, line 4, change "terminl" to --terminal--; claim 7, line 6, the limitation "the circular inner" lacks antecedent basis. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 6, 7, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Utility Model Publication No. SHO 58-049590 in view of Published Japanese patent application No. SHO 58-082461 and Published Japanese patent application No. HEI 05-205712.

Japanese Utility Model Publication No. SHO 58-049590 discloses that an AC adaptor 6 can be attached to a battery housing portion 4, by the way that the shape of the AC adaptor 6 becomes similar to that of a battery 3.

However, Japanese Utility Model Publication No. SHO 58-049590 does not disclose the insertion limiting portion c being formed by projecting a part of the outer circumference of the cylindrical main body in a rectangular manner along the longitudinal direction of the main body and having two sides each of which extends from

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a part of the outer circumference of the AC adapter, wherein the center angle of the circular arc obtained by connecting the proximal ends of the two sides on the outer circumference of the AC adapter is less than 90°; and the battery housing portion includes an insertion guide portion which is formed by cutting, in a rectangular shape, a part of the circular inner circumferential wall thereof to meet the shape of an insertion limiting portion formed by projecting a part of the outer circumference of the DC adapter and is engaged with the insertion limiting portion when the DC adapter is inserted with the proper polarity to guide the insertion of the DC adapter, the center angle of the circular arc obtained by connecting the proximal ends of two sides constituting the insertion guide portion on the inner circumference of the battery housing portion is less than 90 degree.

Published Japanese patent application No. SHO 58-082461 and Published Japanese patent application No. HEI 05-205712 discloses that it is old and well known in the common art to prevent that the battery is connected with reverse polarity by providing with an insertion limiting portion formed by square shape and projected to longitudinal direction; wherein the top of the insertion regulation portion is chamfered in the shape of a circular arc; and wherein the first face and the second face are extended to the tangential direction of the end in the main body.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese Utility Model Publication No. SHO 58-049590 by constructing the insertion limiting portion as disclosed by Published Japanese patent application No. SHO 58-082461 and Published Japanese patent

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application No. HEI 05-205712 in order to prevent an adaptor from the connection with reverse polarity. As discloses in Published Japanese patent application No. SHO 58-082461 and Published Japanese patent application No. HEI 05-205712, it has no difficulty to adopt the technology disclosed in Published Japanese patent application No. SHO 58-082461 and Published Japanese patent application No. HEI 05-205712 in order to prevent an adaptor from the connection with reverse polarity. Also, it would have been obvious to modify Japanese Utility Model Publication No. SHO 58-049590 by having the insertion limitation portion extending as the claimed invention, since applicants have not disclosed that having the insertion limitation portion extends at this specific direction or angle solves any stated problem or is for any particular purpose and it appears that the connecting device would perform equally well with insertion limitation portion disclosed by Published Japanese patent application No. SHO 58-082461 and Published Japanese patent application No. HEI 05-205712.

The recitation that the adapter is a DC adaptor has not been given significant patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951).

***Allowable Subject Matter***

4. Claims 3-5, 8-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: In regard to claims 3 and 8, the prior art fails to provide, teach or suggest the adapter main body is formed by arranging a plurality of cylindrical bodies in the direction perpendicular to the longitudinal direction, and an electrode terminal is formed at the concave portion between the cylindrical bodies; and in combination with all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



THO D. TA  
PRIMARY EXAMINER

tdt  
08/06/07